Military Aviation and Installation Assurance Siting Clearinghouse Prepared Statement for the Montana Interim Committee on Energy and Telecommunications

Thank you Chairman Skees and members of the Committee. I am Ron Tickle, Executive Director of the Department of Defense Military Aviation and Installation Assurance Siting Clearinghouse. On behalf of the Department of Defense (DoD), I would like to thank the Montana Interim Committee on Energy and Telecommunications for the opportunity to provide comments on wind turbine siting compatibility with Department of Defense activities, as well as for your efforts to ensure that the national defense mission is considered in certain energy siting decisions. As the Committee knows, DoD has a significant presence in Montana.

The mission of the Clearinghouse is to protect DoD's military readiness and operational capabilities from incompatible energy development. The Clearinghouse does this by collaborating with DoD components and external stakeholders to prevent, minimize, or mitigate adverse impacts on military training, testing, and operations. Congress established the Clearinghouse in section 358 of the National Defense Authorization Act for Fiscal Year 2011 and subsequently modified and codified these requirements in title 10, section 183a, of the U.S. Code, which addresses the Armed Forces. This law gives DoD a voice within the Federal Aviation Administration's (FAA's) Obstruction Evaluation Airport and Airspace Analysis (OE/AAA) program and sets clear guidelines for DoD's interactions with the public on energy project proposals. Under this statute, DoD may only object to development of energy projects when unacceptable risks to national security cannot feasibly and affordably be mitigated. It is important to note that these objections are advisory only, and are not binding on FAA, the project proponent, or permitting authorities at the state or local levels.

The FAA and the Clearinghouse perform different functions when reviewing proposed energy and energy-related structures. For wind turbines over 200 feet or near an airfield, the FAA assesses whether a structure presents a hazard to air navigation or degrades the safe and efficient use of the navigable

airspace. The Clearinghouse determines whether the structure presents an unacceptable risk to national security and reports those findings to FAA. That determination is only made after full discussion of possible mitigations with the developer.

Of energy and energy-related projects, wind turbines often have the greatest impacts on military training, testing, and operations due to both their height and their effects on a wide variety of radar systems. Wind turbines are typically 500 feet or more in height and are expected to be even taller in the near future. Wind turbines can severely degrade certain aviation training and operations that occur in low-level military training routes or near sensitive facilities. Several cases of potential obstruction have been resolved by moving turbines out of a military training area or reducing the project footprint within the route.

DoD air traffic control radar, weather radar, and other military-unique radars can be adversely impacted by the spinning blades of wind turbines. In many cases, DoD can use developer funds, accepted under statutory authority for voluntary contributions, to mitigate the effects of the turbines. For example, in cases where the turbines degrade radar performance, radar modification can often reduce the impacts.

When the Clearinghouse assesses a proposed wind or other energy project, title 10 requires the Clearinghouse first to assess whether the project will have an adverse impact on military readiness and operations. When the Clearinghouse, after coordination with the Military Departments, makes this determination, the Clearinghouse then issues three notifications: 1) we inform the developer of the potential adverse impact determination and request mitigation discussions, 2) we notify the Governor of the state in which the project is located that we have made this determination and request comments, and 3) we identify a Military Department to lead discussions with the developer in order to identify any potential solutions. For example, should a wind farm be determined by the Air Force to pose an adverse impact on ballistic missile silo operations, we would task the Department of Air Force to lead discussions with the project developer.

At that point, the lead Military Department establishes a Mitigation Response Team to conduct any necessary analyses or studies to find a solution. As required under our statute, the DoD assessment will identify any feasible and affordable actions that can be taken by DoD, the developer of the project, or others to mitigate the adverse impact and to minimize risks to national security while allowing the project to proceed. If the parties are successful in finding a solution, a mitigation agreement is signed by the developer, the lead Military Department, and the Assistant Secretary of Defense for Sustainment. This process has proven to be an effective and flexible means to mitigate potential impacts.

Since 2012, DoD has reviewed over 5,500 wind projects nationwide, the vast majority of which were found to have little to no impact. DoD has entered into approximately 150 formal mitigation discussions with wind energy developers. In 36 of those cases to date, the discussions resulted in a written agreement to mitigate adverse impacts on military readiness and operations. In some instances, a less formal mitigation approach resolved DoD's concerns. In others, developers have cancelled projects or moved to alternate sites.

DoD has a proven record of supporting thousands of energy development projects that are compatible with our ability to test, train, and operate. Most projects are compatible or can become compatible with reasonable mitigation measures. Most wind energy developers are good partners with DoD and work closely with us to find solutions that allow for energy development while also allowing our military missions to continue.

It is in the rare case when a developer will not collaborate with DoD or when we cannot reach agreement that we need state support. Recently a developer of a wind project in another state constructed dozens of wind turbines within low-level military air training routes without an FAA Determination of No Hazard or a determination from DoD that their activity was compatible with national security – all permissible under federal laws and regulations, because FAA's and DoD's processes are advisory only. In that case,

it was only a state law that halted the construction until DoD's concerns were addressed. Otherwise, the development would have resulted in several essential low-level military training routes becoming unusable. After additional discussions convened because of the state law's requirements, DoD and the developer agreed to an alternate siting plan that allowed for construction of about two-thirds of the project while protecting military missions.

Because the FAA and DoD determinations are advisory and not binding on developers or permitting authorities, it is in these cases where DoD encourages, and needs, state support.

As to wind projects within Montana, we have reviewed 129 wind energy projects over the past five years. Of those, the Clearinghouse and the Air Force determined that eight projects would pose an adverse impact on DoD operations and readiness, and therefore we established Mitigation Response Teams for those eight. Two of those wind farms would have degraded radar systems used by the North American Aerospace Defense Command (NORAD) to protect U.S. airspace, one would have affected a weather radar system, two would have presented a risk to Intercontinental Ballistic Missile (ICBM) locations or operations, and three would have obstructed low-level aviation military training routes in Montana. Two of the wind projects were cancelled by the developers, two were built after discussions and mitigation with the Air Force, and the remainder are still in various stages of discussion. The potential for significant expansion of wind energy development underscores the importance of a thoughtful and deliberative siting review process.

Montana is one of five states that host ICBM sites. After careful study, the Department of the Air Force has found that wind turbines constructed within a two-nautical-mile (nm) radius of an ICBM Launch Facility or Missile Alert Facility pose safety hazards to mission-essential nuclear security helicopter operations.

Support Needed

DoD needs your support in the infrequent cases where we cannot reach agreement with an energy developer. As previously noted, while DoD has the ability to object to the project through FAA's OE/AAA process, this objection by a federal agency does not prohibit construction. Due to the unique requirements of the ICBM mission, DoD requests that the Montana legislature (1) support a 2-nm wind turbine exclusion zone around each missile silo location, and (2) support a statewide approach to protect the other critical defense missions conducted within the state. We offer drafting and other support as needed.

DoD is working with several states to enact protections for all DoD missions. Oklahoma amended its wind energy setback statute (17 OK Stat § 17-160.20) in 2018 to require developers to work with DoD to

resolve military mission compatibility issues before construction. This approach has proven to be effective, and the Clearinghouse has supported similar legislation in other states. This year, DoD worked closely with the Indiana state legislature that passed a bill similar to Oklahoma's that was signed in law on March 18th. Both of these laws focus state authorities on preventing incompatible energy development impacts to the military by requiring documentation from both the FAA and DoD that the proposed project will not adversely impact military readiness and operations. The practical result of our experiences in Oklahoma since passage of its law is that the energy developers engage with DoD and the local installations earlier than is required by the statute in order to propose a project that is acceptable to DoD, and not finding out after the fact that their project poses an unacceptable risk to national security. We have engaged several states over the past year to seek state support for legislation that protects DoD's vital mission.

We support your efforts to ensure that energy siting is conducted in a thoughtful manner that protects military missions in Montana while allowing compatible development.

Thank you for providing me the opportunity to address this committee and for your support for national security as you plan for compatible domestic renewable energy development. We look forward to continuing the dialogue and supporting statewide approaches to ensure development of wind energy is compatible with military activities in the State of Montana.

I would be glad to answer any questions.